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Edward Pennington			ABEL JALIL, NEVEEN	
Swidler Berlin Shereff Friedman, LLP Suite 300			ART UNIT	PAPER NUMBER
3000 K Street, N.W. Washington, DC 20007-5116			2175	
			DATE MAILED: 11/25/2003	$\epsilon$

Please find below and/or attached an Office communication concerning this application or proceeding.

		I A will will be No.					
Office Action Commons		Application No.	Applicant(s)				
		09/961,354	SLESINSKY, BRIAN				
	Office Action Summary	Examiner	Art Unit				
	T. MAN NO DATE 641	Neveen Abel-Jalil	2175				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status							
1)⊠	Responsive to communication(s) filed on 31	October 2003.					
2a)⊠	This action is <b>FINAL</b> . 2b) ☐ Thi	s action is non-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4)⊠	4) Claim(s) 1-33 is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)	5) Claim(s) is/are allowed.						
•	6)⊠ Claim(s) <u>1-33</u> is/are rejected.						
•	7) Claim(s) is/are objected to.						
•	8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers							
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. §§ 119 and 120							
12)							
Attachment(s)							
2) Notic	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	r (PTO-413) Paper No(s) Patent Application (PTO-152)				

Art Unit: 2175

## **DETAILED ACTION**

The request for reconsideration filed on October 31, 2003 has been received and entered.
 Claims 1-33 are pending.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1, 10, 12, 21, 23, and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Arun et al. (U.S. Patent No. 6,557,012 B1).

As to claim 1, <u>Arun et al.</u> discloses a method of maintaining databases in synchronism with software applications which support the databases in relation to installations (See column 29, lines 26-37, wherein "software" reads on "instructions"), the method comprising the steps of:

obtaining a table schema employable by a database supported by a version of a software application (See column 28, lines 7-30, wherein "software application" reads on "encoded…application programs", also see column 6, lines 31-43);

synchronizing the table schema implemented by the database to conform to with the table schema employable by the database (See column 19, lines 38-53);

Art Unit: 2175

wherein the synchronizing is in association with an installation of the version of the software application (See column 19, lines 54-67, and see column 20, lines 1-10).

As to claim 10, <u>Arun et al.</u> discloses wherein synchronizing the table schema implemented by the database to conform with the table schema employable by the database includes creating schema data in the table schema implemented by the database according to the schema employable by the database (See column 7, lines 34-51, also see column 6, lines 31-43).

As to claim 12, <u>Arun et al.</u> discloses a system for maintaining databases in synchronism with software applications which support the databases in relation to installations (See column 29, lines 26-37, wherein "software" reads on "instructions"), the method comprising the steps of:

a first interface operable to obtain a table schema employable by a database supported by a version of a software application (See column 28, lines 7-30, wherein "software application" reads on "encoded…application programs", also see column 6, lines 31-43);

a script maker-operable to synchronize the table schema implemented by the database to conform with the table schema employable by the database (See column 19, lines 38-53, also see column 29, lines 26-37, wherein "script maker" reads on "instructions");

wherein the synchronizing is in association with an installation of the version of the software application (See column 19, lines 54-67, and see column 20, lines 1-10).

Art Unit: 2175

As to claim 21, <u>Arun et al.</u> discloses wherein the script make is operable to create schema data in the table schema implemented by the database according to the schema employable by the database (See column 7, lines 34-51, also see column 6, lines 31-43).

As to claim 23, <u>Arun et al.</u> discloses a computer program product for maintaining databases in synchronism with software applications which support the databases in relation to installations (See column 29, lines 26-37, wherein "software" reads on "instructions"), to the computer program product comprising:

a computer readable medium; and

computer program instructions, recorded on the computer readable medium, executable by a processor (See column 29, lines 26-37, also see column 13, lines 11-27), for performing the steps of:

obtaining a table schema employable by a database supported by a version of a software application (See column 28, lines 7-30, wherein "software application" reads on "encoded…application programs", also see column 6, lines 31-43); and

synchronizing the table schema, implemented by the database to conform with the table schema employable by the database (See column 19, lines 38-53);

wherein the synchronizing is in association with an installation of the version of the software application (See column 19, lines 54-67, and see column 20, lines 1-10).

As to claim 32, <u>Arun et al.</u> discloses wherein synchronizing the table schema implemented by the database to conform with the table schema employable by the database

includes creating schema data in the table schema implemented by the database according to the schema employable by the database (See column 7, lines 34-51, also see column 6, lines 31-43).

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 2-9, 11, 13-20, 22, 24-31, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Arun et al.</u> (U.S. Patent No. 6,557,012 B1) in view of <u>Grier et al.</u> (U.S. Pub. 2002/0100017 A1).

As to claim 2, <u>Arun et al.</u> does not teach comprising storing the table schema is employable by the database in a configuration file.

Grier et al. teaches comprising storing the table schema is employable by the database in a configuration file (See abstract, also see page 10, paragraphs 0075-0076).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified <u>Arun et al.</u> to include comprising storing the table schema is employable by the database in a configuration file.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Arun et al. by the teaching of <u>Grier et al.</u> to include comprising

Art Unit: 2175

storing the table schema is employable by the database in a configuration file because a configuration file provides an efficient location to store and access version data during and after initial application software installation.

Page 6

As to claim 3, <u>Arun et al.</u> as modified still does not teach wherein the file is provided in a markup language including database representation table data associated with the version of the software application.

Grier et al. teaches wherein the file is provided in a markup language including database representation table data associated with the version of the software application (See <u>Grier et al.</u> page 4, paragraph 040, also see <u>Grier et al.</u> page 9, paragraph 0066)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified <u>Arun et al.</u> as modified to include wherein the file is provided in a markup language including database representation table data associated with the version of the software application.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Arun et al. as modified by the teaching of Grier et al. to include wherein the file is provided in a markup language including database representation table data associated with the version of the software application because markup languages are well used today in the database art which create standard efficient representation of the underlying data records over distributed networked devices.

Art Unit: 2175

As to claim 4, <u>Arun et al.</u> as modified discloses comprising determining that the table schema employable by the database conflicts with a table schema implemented by the database (See column 19, lines 54-67, wherein "determining... conflicts" reads on "detection").

As to claim 5, <u>Arun et al.</u> as modified discloses wherein determining that the table schema employable by the database conflicts with the table schema implemented by the database includes reading the configuration file (See column 20, lines 11-31, wherein "reading" reads on "generate...it provide them to the user").

As to claim 6, <u>Arun et al.</u> as modified discloses wherein determining that the table schema employable by the database conflicts with the table schema implemented by the database includes examining the table schema implemented by the database (See column 5, lines 15-36).

As to claim 7, <u>Arun et al.</u> as modified discloses wherein determining that the table schema employable by the database conflicts with the table schema (See column 5, lines 15-36) implemented by the database includes identifying schema data in the table schema employable by the database required in the table schema implemented by the database (See column 6, lines 18-43).

As to claim 8, <u>Arun et al.</u> as modified discloses wherein synchronizing the table schema implemented by the database to conform with the table schema employable by the database

includes adding the schema data to the schema implemented by the database (See column 6, lines 18-43).

As to claim 9, <u>Arun et al.</u> as modified discloses comprising performing an update installation of the software application (See <u>Grier et al.</u> page 9, paragraph 0065).

As to claim 11, <u>Arun et al.</u> does not teach comprising performing an initial installation of the software application.

Grier et al. teaches teach comprising performing an initial installation of the software application (See Grier et al. page 2, paragraph 0012, also see Grier et al. page 4, paragraph 0038).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified <u>Arun et al.</u> to include comprising performing an initial installation of the software application.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Arun et al. by the teaching of Grier et al. to include comprising performing an initial installation of the software application because up-to-date application software enhancing the access to the database during or after the initial installation provides for reductions in error and decrease in business costs of implementation.

As to claim 13, <u>Arun et al.</u> does not teach comprising a configuration file operable to store the table schema employable by the database.

Grier et al. teaches comprising storing the table schema is employable by the database in a configuration file (See abstract, also see page 10, paragraphs 0075-0076).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified <u>Arun et al.</u> to include comprising storing the table schema is employable by the database in a configuration file.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified <u>Arun et al.</u> by the teaching of <u>Grier et al.</u> to include comprising storing the table schema is employable by the database in a configuration file because a configuration file provides an efficient location to store and access version data during and after initial application software installation.

As to claim 14, <u>Arun et al.</u> as modified still does not teach wherein the file is provided in a markup language including database representation table data associated with the version of the software application.

Grier et al. teaches wherein the file is provided in a markup language including database representation table data associated with the version of the software application (See Grier et al. page 4, paragraph 040, also see Grier et al. page 9, paragraph 0066)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified <u>Arun et al.</u> as modified to include wherein the file is provided in a markup language including database representation table data associated with the version of the software application.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Arun et al. as modified by the teaching of Grier et al. to include wherein the file is provided in a markup language including database representation table data associated with the version of the software application because markup languages are well used today in the database art which create standard efficient representation of the underlying data records over distributed networked devices.

As to claim 15, <u>Arun et al.</u> as modified discloses comprising a difference algorithm operable to determine that the table schema employable by the database conflicts with a table schema implemented by the database (See column 19, lines 54-67, wherein "determining...conflicts" reads on "detection").

As to claim 16, <u>Arun et al.</u> as modified discloses wherein the difference algorithm is operable to read the configuration file (See column 20, lines 11-31, wherein "reading" reads on "generate...it provide them to the user").

As to claim 17, <u>Arun et al.</u> as modified discloses wherein the difference algorithm is operable to examine the table schema implemented by the database (See column 5, lines 15-36).

As to claim 18, <u>Arun et al.</u> as modified discloses wherein the difference algorithm is operable to identify schema data in the table schema (See column 6, lines 18-43) employable by

the database required in the table schema implemented by the database (See column 5, lines 15-36).

As to claim 19, <u>Arun et al.</u> as modified discloses wherein the script maker is operable to add the schema data to the schema implemented by the database (See column 6, lines 18-43).

As to claim 20, <u>Arun et al.</u> as modified discloses wherein an update installation of the software application is performed (See <u>Grier et al.</u> page 9, paragraph 0065).

As to claim 22, <u>Arun et al.</u> does not teach comprising performing an initial installation of the software application.

Grier et al. teaches teach comprising performing an initial installation of the software application (See Grier et al. page 2, paragraph 0012, also see Grier et al. page 4, paragraph 0038).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified <u>Arun et al.</u> to include comprising performing an initial installation of the software application.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified <u>Arun et al.</u> by the teaching of <u>Grier et al.</u> to include comprising performing an initial installation of the software application because up-to-date application software enhancing the access to the database during or after the initial installation provides for reductions in error and decrease in business costs of implementation.

Art Unit: 2175

As to claim 24, <u>Arun et al.</u> does not teach comprising computer program instruction for storing the table schema employable by the database in a configuration file.

<u>Grier et al.</u> teaches comprising storing the table schema is employable by the database in a configuration file (See abstract, also see page 10, paragraphs 0075-0076).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified <u>Arun et al.</u> to include comprising storing the table schema is employable by the database in a configuration file.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Arun et al. by the teaching of Grier et al. to include comprising storing the table schema is employable by the database in a configuration file because a configuration file provides an efficient location to store and access version data during and after initial application software installation.

As to claim 25, <u>Arun et al.</u> as modified still does not teach wherein the file is provided in a markup language including database representation table data associated with the version of the software application.

<u>Grier et al.</u> teaches wherein the file is provided in a markup language including database representation table data associated with the version of the software application (See <u>Grier et al.</u> page 4, paragraph 040, also see <u>Grier et al.</u> page 9, paragraph 0066)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Arun et al. as modified to include wherein the file

is provided in a markup language including database representation table data associated with the version of the software application.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Arun et al. as modified by the teaching of Grier et al. to include wherein the file is provided in a markup language including database representation table data associated with the version of the software application because markup languages are well used today in the database art which create standard efficient representation of the underlying data records over distributed networked devices.

As to claim 26, Arun et al. as modified discloses comprising computer program instruction for determining that the table schema employable by the database conflicts with a table schema implemented by the database (See column 19, lines 54-67, wherein "determining...conflicts" reads on "detection").

As to claim 27, Arun et al. as modified discloses wherein determining that the table schema employable by the database conflicts with the table schema implemented by the database includes reading the configuration file (See column 20, lines 11-31, wherein "reading" reads on "generate...it provide them to the user").

As to claim 28, Arun et al. as modified discloses wherein determining that the table schema employable by the database conflicts with the table schema implemented by the database includes examining the table schema implemented by the database (See column 5, lines 15-36).

As to claim 29, <u>Arun et al.</u> as modified discloses wherein determining that the table schema employable by the database conflicts with the table schema (See column 6, lines 18-43) implemented by the database includes identifying schema data in the table schema employable by the database required in the table schema implemented by the database (See column 5, lines 15-36).

As to claim 30, <u>Arun et al.</u> as modified discloses wherein synchronizing (See column 19, lines 29-53, also see column 20, lines 11-47) the table schema implemented by the database to conform with the table schema employable by the database includes adding the schema data to the schema implemented by the database (See <u>Grier et al.</u> page 10, paragraph 0075, wherein "conforms" reads on "same schema", also see <u>Arun et al.</u> column 1, lines 18-30, also see <u>Arun et al.</u> column 6, lines 18-43).

As to claim 31, <u>Arun et al.</u> as modified discloses comprising: computer program instruction for performing an update installation of the software application (See <u>Grier et al.</u> page 9, paragraph 0065).

As to claim 33, <u>Arun et al.</u> does not teach comprising performing an initial installation of the software application.

Art Unit: 2175

Grier et al. teaches teach comprising performing an initial installation of the software application (See Grier et al. page 2, paragraph 0012, also see Grier et al. page 4, paragraph 0038).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified <u>Arun et al.</u> to include comprising performing an initial installation of the software application.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified <u>Arun et al.</u> by the teaching of <u>Grier et al.</u> to include comprising performing an initial installation of the software application because up-to-date application software enhancing the access to the database during or after the initial installation provides for reductions in error and decrease in business costs of implementation.

## Response to Arguments

6. Applicant's arguments filed on October 31, 2003 have been fully considered but they are not persuasive.

Applicant's arguments in pages 2 and 3 that nowhere in the passage cited by the Examiner does <u>Arun</u> discloses obtaining a table schema employable by a database supported by a version of a software application" is fully acknowledged but is no deemed to be persuasive.

The Examiner point to <u>Arun</u> column 15, lines 55-67, wherein <u>Arun</u> teaches associations between states being formatted according the specific versioning schema being employable by the database. <u>Arun</u> in column 7, lines 8-45, and column 8, lines 14-41 teaches versioning of the data stored in the database table and relationships among versions being identifiers in fields.

Art Unit: 2175

Arun's invention is described in connection a relational database arrangement as taught in column 28, lines 4-13.

In general, a schema is an abstract representation of an object's characteristics and relationship to other objects. And according to searchDatabase.com, a TechTarget site for Database professionals, schema is defined as:

1) In computer programming, a schema (pronounced SKEE-mah) is the organization or structure for a database. The activity of data modeling leads to a schema. (The plural form is schemata. The term is from a Greek word for "form" or "figure." Another word from the same source is "schematic.") The term is used in discussing both relational databases and object-oriented databases. The term sometimes seems to refer to a visualization of a structure and sometimes to a formal text-oriented description.

Applicant's argument that "Arun does not disclose computer program instructions executed by a processor for obtaining a table schema employable by a database supported by a version of a software application" is fully acknowledged but is no deemed to be persuasive.

The Examiner points to Arun column 4, lines 17-42, where he teaches computer program product enabling the invention. As discussed above, schema related to the database table is disclosed in <u>Arun</u> column 15, lines 55-67, wherein associations between states being formatted according the specific versioning schema being employable by the database is taught. In column 7, lines 8-45, and column 8, lines 14-41, <u>Arun</u> also teaches versioning of the data stored in the database table and relationships among versions being identifiers in fields.

Art Unit: 2175

Arun's invention is described in connection a relational database arrangement as taught in column 28, lines 4-13.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5

USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, <u>Arun</u> is modified by the teachings of <u>Grier et al.</u> to teach performing an initial installation of the software application and to teach the file to be provided in a markup language including database representation table data associated with the version of the software application as identified in non-final office action paper No. 5 (dated July 31, 2003).

The Examiner is establishing motivation in obviousness in the knowledge generally available to one of ordinary skill in the art, to modify the invention of <u>Arun et al.</u> with the teachings of <u>Grier et al.</u>, as explained in the referenced office action.

## Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

Art Unit: 2175

Page 18

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 703-305-8114. The examiner can normally be reached on 8:00AM-4: 30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 703-305-3830. The fax phone number for the organization where this application or proceeding is assigned is 703-746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Neveen Abel-Jalil November 17, 2003 CHARLES RONES
PRIMARY EXAMINER